

IN THE CLAIMS

Please cancel claims 76-77, 84-85 and 92-93 without prejudice or disclaimer.

Please amend claims 78, 80, 81, 82, 86, 88, 89, 90, 94, 96, 97 and 98 as indicated below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-77 (cancelled)

1 Claim 78 (currently amended) ~~The method as recited in claim 77 further comprising~~
2 ~~the step of:~~ A method for detecting a dead gateway comprising the steps of:

3 sending a first Transmission Control Protocol (TCP) packet of data from an
4 application of a sender host to a receiver host through a first gateway;

5 failing to receive an acknowledgment of received data from said receiver host;

6 deleting an Address Resolution Protocol (ARP) entry associated with said first
7 gateway in said sender host;

8 sending an ARP request to said first gateway upon deletion of said ARP entry;

9 wherein if a response to said ARP request is not received from said receiver
10 host, then said first gateway is inoperative;

11 selecting an alternative path to send a packet of data from said sender host to
12 said receiver host through a second gateway in a routing table in said sender host if
13 said response to said ARP request is not received from said receiver host; and

14 marking routes that use said first gateway to a lower priority level from an
15 original priority level in said routing table in said sender host.

1 Claim 79 (previously presented) The method as recited in claim 78, wherein said
2 routes that use said first gateway return to their original priority level after a duration
3 of time.

1 Claim 80 (currently amended) The method as recited in claim [[77]] 78 further
2 comprising the step of:

3 sending a non-TCP packet of data to said receiver host through said second
4 gateway using [[said]] an alternative gateway.

1 Claim 81 (currently amended) The method as recited in claim [[77]] 78 further
2 comprising the step of:

3 sending a second TCP packet of data to said receiver host through said second
4 gateway using [[said]] an alternative gateway.

1 Claim 82 (currently amended) The method as recited in claim [[76]] 78, wherein if a
2 response to said ARP request is received from said receiver host, then said first
3 gateway is operative.

1 Claim 83 (previously presented) The method as recited in claim 82 further
2 comprising the step of:

3 sending one of a TCP and a non-TCP packet of data through said first
4 gateway.

Claims 84-85 (cancelled)

1 Claim 86 (currently amended) ~~The computer program product as recited in claim 85~~
2 ~~further comprising the programming step of:~~ A computer program product embodied
3 in a machine readable medium for detecting a dead gateway comprising the
4 programming steps of:

5 sending a Transmission Control Protocol (TCP) packet of data from an
6 application of a sender host to a receiver host through a first gateway;

7 failing to receive an acknowledgment of received data from said receiver host;

8 deleting an Address Resolution Protocol (ARP) entry associated with said first
9 gateway in said sender host;

10 sending an ARP request to said first gateway upon deletion of said ARP entry;

11 wherein if a response to said ARP request is not received from said receiver
12 host, then said first gateway is inoperative;

13 selecting an alternative path to send a packet of data from said sender host to
14 said receiver host through a second gateway in a routing table in said sender host if
15 said response to said ARP request is not received from said receiver host; and

16 marking routes that use said first gateway to a lower priority level from an
17 original priority level in said routing table in said sender host.

1 Claim 87 (previously presented) The computer program product as recited in claim
2 86, wherein said routes that use said first gateway return to their original priority level
3 after a duration of time.

1 Claim 88 (currently amended) The computer program product as recited in claim
2 [[85]] 86 further comprising the programming step of:

3 sending a non-TCP packet of data to said receiver host through said second
4 gateway using [[said]] an alternative gateway.

1 Claim 89 (currently amended) The computer program product as recited in claim
2 [[85]] 86 further comprising the programming step of:

3 sending a second TCP packet of data to said receiver host through said second
4 gateway using [[said]] an alternative gateway.

1 Claim 90 (currently amended) The computer program product as recited in claim
2 [[84]] 86, wherein if a response to said ARP request is received from said receiver
3 host, then said first gateway is operative.

1 Claim 91 (previously presented) The computer program product as recited in claim
2 90 further comprising the programming step of:

3 sending one of a TCP and a non-TCP packet of data through said first
4 gateway.

Claims 92-93 (cancelled)

1 Claim 94 (currently amended) ~~The system as recited in claim 93, wherein said~~
2 ~~processor further comprises:~~ A system, comprising:

3 a processor; and

4 a memory unit coupled to said processor, wherein said memory unit is
5 operable for storing a computer program for detecting a dead gateway;

6 wherein said processor, responsive to said computer program, comprises:

7 circuitry for sending a Transmission Control Protocol (TCP) packet of data
8 from an application of a sender host to a receiver host through a first gateway;

9 circuitry for failing to receive an acknowledgment of received data from said
10 receiver host;

11 circuitry for deleting an Address Resolution Protocol (ARP) entry associated
12 with said first gateway in said sender host;

13 circuitry for sending an ARP request to said first gateway upon deletion of
14 said ARP entry;

15 wherein if a response to said ARP request is not received from said receiver
16 host, then said first gateway is inoperative;

17 circuitry for selecting an alternative path to send a packet of data from said
18 sender host to said receiver host through a second gateway in a routing table in said
19 sender host if said response to said ARP request is not received from said receiver
20 host; and

21 circuitry for marking routes that use said first gateway to a lower priority level
22 from an original priority level in said routing table in said sender host.

1 Claim 95 (previously presented) The system as recited in claim 94, wherein said
2 routes that use said first gateway return to their original priority level after a duration
3 of time.

1 Claim 96 (currently amended) The system as recited in claim [[93]] 94, wherein said
2 processor further comprises:

3 circuitry for sending a non-TCP packet of data to said receiver host through
4 said second gateway using [[said]] an alternative gateway.

1 Claim 97 (currently amended) The system as recited in claim [[93]] 94, wherein said
2 processor further comprises:

3 circuitry for sending a second TCP packet of data to said receiver host through
4 said second gateway using [[said]] an alternative gateway.

1 Claim 98 (currently amended) The system as recited in claim [[92]] 94, wherein if a
2 response to said ARP request is received from said receiver host, then said first
3 gateway is operative.

1 Claim 99 (previously presented) The system as recited in claim 98, wherein said
2 processor further comprises:

3 circuitry for sending one of a TCP and a non-TCP packet of data through said
4 first gateway.